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Clayton L. Robinson

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EXAMINER

HYLTON, ROBIN ANNETTE

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/026,161	<b>Applicant(s)</b> ROBINSON ET AL.	
	<b>Examiner</b> Robin A. Hylton	<b>Art Unit</b> 3781	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,4-9,11,13-21 and 24-38 is/are pending in the application.
- 4a) Of the above claim(s) 24 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4-9,11,13-21 and 26-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. Claims 27, 37, 38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 27 and 37, there is no support in the specification as originally filed for the angle of the upper edge of the thread being less than about 60°. The (written) specification at pages 5 and 8 specifically sets forth the angle of the upper edge of the thread is less than about 45°. While 45° is less than 60°, the new claim language sets forth a range of angles not supported in the originally filed specification. This is a **new matter** rejection.

Regarding claims 37 and 38, there is no support in the originally filed specification for a "non-foam" liner or a liner being "free from foaming agents" since the (written) specification specifically includes sets forth the liner "may also include foaming agents" at page 9, line 6. This is a **new matter** rejection.

2. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The structure of the liner as set forth in claim 30 contradicts the claimed structure of claim of claim 28 from which it depends. Claim 28 sets forth the liner as comprising a thermoset and a thermoplastic material. Claim 30 then sets forth the liner as being of either or a combination of both materials. Correction is required.

***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 28 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Ou-Yang (US 4,818,577).

Ou-Yang ' 577 discloses in the "summary of the invention" that the closure is an improvement of a closure used in conditions of temperatures in excess of 250° F, a temperature that is characteristic of retort-filling operations" discussed in the "background of the invention". Thus, the closure of Ou-Yang "can be passed through" a retort-filling operation.

Ou-Yang discloses closure a closure in combination with a container having a neck with a lip defining an opening therein, and a seal (30) covering said opening; a closure having a top with an interior surface and a skirt depending from the top and defining a skirt interior surface, and having at least one thread affixed to the interior skirt surface in a spiral and engageable with a mating thread on an exterior surface of said neck; and a liner having a resting thickness at ambient temperature and pressure conditions, said liner being made from a material capable of being compressed to a thickness less than the resting thickness and being capable of recovering to a recovery thickness in a sealing zone such that said seal is sandwiched between said liner and said container lip at a pressure sufficient to retain said seal against said lip when said sealed container is subject to retort processing conditions, said liner being a resiliently compressible material having at least a portion of a thermoset material (12)(polyurethane) in combination with a thermoplastic material (14) to provide a high enough melting point such that said closure can be passed through a retort processing without said seal detaching from said container lip.

Regarding claim 31, see column 3, line 37-39.

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5. Claims 4 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ou-Yang '577.

As set forth in the rejection under 35 USC 102 above, Ou-Yang '577 discloses the claimed retort capable closure and container, wherein the liner is made of at least a portion of rubber (16) and a portion of a thermoplastic material (14). Regarding the claimed relative internal pressure of the container, internal container pressure exceeding 0 PSI inherently occurs with high temperature conditions.

***Claim Rejections - 35 USC § 103***

6. Claims 2, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou-Yang '577 in view of Markovich et al. (US 5,723,507).

The background of the patent to Ou-Yang '577 states the closure liner is to be used in conditions wherein the temperature exceeds 250° F, but does not specifically set forth the desired temperature is 265° F. Additionally, Ou-Yang '577 is silent regarding the shore A hardness of the liner material. See column 3, lines 38-40 regarding the material set forth in claims 3 and 30.

Markovich teaches thermoplastic and thermoplastic rubber liners having a shore A hardness value of about 70.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further provide the closure with a liner having a melting point greater than about 265° F and a shore A hardness value of about 70. Doing so provides a closure capable of withstanding high temperatures in a retort process and which maintains a sufficient seal between the closure and container.

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7. Claims 5-8 and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou-Yang '577 in view of Montgomery et al (US 5,009,323).

Ou-Yang '577 discloses the claimed retort capable closure and container except for an essentially circular tamper-evident band depending from the closure skirt.

Montgomery teaches it is known to provide a closure with an essentially circular tamper-evident band depending from the closure skirt. Two types of bands are known wherein one comprises a continuous bead and one comprises flexible finger projections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Montgomery's essentially circular tamper-evident band depending from the closure skirt of Ou-Yang '577. Doing so is a known practice in the closure art to protect the contents of a sealed container and to alert the end user of possible tampering.

8. Claims 9 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou-Yang '577 in view of Kelly (US 6,202,871).

Ou-Yang '577 as modified teaches the claimed closure (and container) except for at least one slit extending a predetermined length from the top to the skirt.

Kelly teaches it is known to provide a closure with various configurations of slits extending a predetermined length from the top to the skirt.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further apply the teaching of at least one slit extending a predetermined length from the top to the skirt of Ou-Yang '577. Doing so allows for air circulation, venting and/or washing of the sealed container.

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9. Claims 11-16 and 27 are rejected under 35 U.S.C. 103(a) as obvious over Ou-Yang '577.

Ou-Yang ' 577 discloses the claimed closure and container as noted. See Figure 3 and column 3, lines 46-53 regarding the structure set forth in claim 27. See column 2, lines 29-35 regarding the material set forth in claims 11 and 12. See column 3, lines 38-40 regarding the at least one layer of bonding material in claim 16. Regarding the claimed relative internal pressure of the container, internal container pressure exceeding 0 PSI inherently occurs with high temperature conditions.

Figures 2 and 3 appear to depict the closure threads having an upper edge wherein an angle  $\Theta$  is defined between the upper edge and a horizontal plane, and the angle  $\Theta$  is less than about  $45^\circ$ .

Wherein the thread of Ou-Yang '577 is not specifically taught to have an angle  $\Theta$  less than about  $60^\circ$ , it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the thread with an angle defined between the upper edge and a horizontal plane of less than about  $60^\circ$  as it known in the art.

Regarding claims 13-15, Ou-Yang teaches the claimed closure and container except for the angle  $\Theta$  being less than about  $20^\circ$  as in claim 13, or the angle  $\Theta$  being about  $20^\circ$  as in claim 14, or the angle  $\Theta$  being less than about  $10^\circ$  as in claim 15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the thread to have an angle  $\Theta$  of any desired dimension including less than about  $20^\circ$  as in claim 13, or about  $20^\circ$  as in claim 14, or less than about  $10^\circ$  as in claim 15 for the desired engagement and slip resistance between the closure and container.

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10. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou-Yang '577 in view of Montgomery.

Ou-Yang '577 discloses the claimed retort capable closure and container except for an essentially circular tamper-evident band depending from the closure skirt.

Montgomery teaches it is known to provide a closure with an essentially circular tamper-evident band depending from the closure skirt. Two types of bands are known wherein one comprises a continuous bead and one comprises flexible finger projections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Montgomery's essentially circular tamper-evident band depending from the closure skirt of Ou-Yang '577. Doing so is a known practice in the closure art to protect the contents of a sealed container and to alert the end user of possible tampering.

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ou-Yang '577 in view of Kelly.

Ou-Yang '577 discloses the claimed closure and container except for at least one slit extending a predetermined length from the top to the skirt.

Kelly teaches it is known to provide a closure with various configurations of slits extending a predetermined length from the top to the skirt.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of at least one slit extending a predetermined length from the top to the skirt of Ou-Yang '577. Doing so allows for air circulation, venting and/or washing of the sealed container.



***Allowable Subject Matter***

12. Claims 37 and 38 appear to avoid the prior art of record. However, in view of the rejection(s) under 35 U.S.C. 112, 1<sup>st</sup> and 2<sup>nd</sup> paragraphs, set forth in this Office action, the claims cannot be deemed allowable.

***Response to Arguments***

13. Applicant's arguments filed April 30, 2007 have been fully considered but they are not persuasive.

Regarding the structure of the liner (10) and seal (30) of Ou-Yang, the disclosure at column 3, lines 43-53 discuss using the liner comprising the thermoset and thermoplastic materials (layers 12 and 14) with a seal (30). Thus, the structure of the claims are met.

Regarding applicant's assertion that foamed liners are unsuitable for retort processes, it is submitted that Ou-Yang discloses that fact in the "description of the prior art" section at column 1, lines 33-40. However, Ou-Yang discloses using the closure and improved multi-layer liner column 1, lines 43-53 at high temperatures and for retort processes.

Additionally, it is submitted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Regarding the remarks at pages 16 and 17 regarding the combinations of Ou-Yang and Montgomery and Ou-Yang and Kelly, it is submitted applicant again repeats the remarks directed to the suitability of the liner of Ou-Yang with respect to retort processes. There is no specific discussion as to the combination of the references. Again, the improved liner of Ou-Yang is capable of withstanding retort processes as disclosed.

***Conclusion***

14. In view of the new grounds of rejection under 35 USC 112 1<sup>st</sup> paragraph as applied to claim 27, this Office action is made non-final.

15. Applicant is duly reminded that a complete response must satisfy the requirements of 37 C.F.R. 1.111, including: "The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. A general allegation that the claims "define a patentable invention" without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section. Moreover, "The prompt development of a clear Issue requires that the replies of the applicant meet the objections to and rejections of the claims." Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP 2163.06 II(A), MPEP 2163.06 and MPEP 714.02. The "disclosure" includes the claims, the specification and the drawings.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Various prior art closures teaching features similar to those disclosed and/or claimed are cited for their disclosures.

17. In order to reduce pendency and avoid potential delays, Group 3720/80 is encouraging FAXing of responses to Office Actions directly into the Group at (571) 273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 3720 will be promptly forwarded to the examiner.

18. It is called to applicant's attention that if a communication is faxed before the reply time has expired, applicant may submit the reply with a "Certificate of Facsimile" which merely asserts that the reply is being faxed on a given date. So faxed, before the period for reply has

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expired, the reply may be considered timely. A suggested format for a certificate follows:

I hereby certify that this correspondence for Application Serial No. \_\_\_\_\_ is being facsimiled to The U.S. Patent and Trademark Office via fax number 571-273-8300 on the date shown below:

Typed or printed name of person signing this certificate

\_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robin Hylton whose telephone number is (571) 272-4540. The examiner can normally be reached Monday - Friday from 9:00 a.m. to 4:00 p.m. (Eastern time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick, can be reached on (571) 272-4561.

Any inquiry of a general nature or relating to the status of this application or proceeding may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). ). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Other helpful telephone numbers are listed for applicant's benefit:

- Allowed Files & Publication (888) 786-0101
- Assignment Branch (800) 972-6382
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